

Town of Lancaster, Massachusetts

Environmental Overlay District Pilot Project

4.0 Buildout Assessment

The majority of the study area is currently undeveloped, so the buildout analysis is particularly important in evaluating and mitigating the impacts of future growth on the water balance. Prevention is a far more cost-effective approach than trying to reestablish a reasonable hydrologic balance when the land has already been developed.

The buildout analysis performed for Lancaster relied on the assumptions used by EOEa in its buildout analysis for the Town, however, a more detailed analysis of parcels was performed. Zoning, land use, wetlands and floodplain data layers were obtained from MA GIS. The 2003 parcel layer was obtained from the Montachusett Regional Planning Commission (MRPC). The 2006 assessor's database was obtained from the Lancaster Assessing Office.

A parcel level analysis was performed to determine existing parcel sizes, which parcels were already developed and which parcels remained to be developed within the study area. This analysis was performed using the 2003 parcel layer and the 2006 parcel database. This database identified the year parcels were developed, allowing for easy identification of developed and undeveloped parcels. The existing zoning classifications were applied to each parcel to determine whether the parcel was or would be developed as residential, limited office or industrial.

Undeveloped parcels were then analyzed further under current zoning to determine the potential number of residential lots that could be developed for each parcel in a residential scenario, and the total square footage of building that could be developed in a commercial/industrial scenario. The following assumptions were applied.

Residential Zoned Parcels – The amount of wetlands and floodplains on each parcel was determined using GIS. As with EOEa, it was assumed that 75% of wetlands and floodplains in the residential district would be included in lot sizing. Based on this, 75% of the wetlands and floodplains were added to the dry upland land. This was multiplied by a factor of 0.839, taken from EOEa, which accounts for roadway right of ways and property setbacks. The number was then divided by two acres to determine the number of new homes that could be developed on each parcel. Homes were rounded to a whole number. An average household size of 2.8, as obtained from the 2000 U.S. Census was applied to obtain the total population for each parcel.

Developed parcels that were greater than four acres were assumed to develop further at buildout. In these cases, one two acre lot was subtracted from the parcel and the remainder was assumed to be developable under the same assumptions identified above.

Limited Office/Industrial – The assumptions used in the EOEa buildout analysis for commercial/industrial development were applied. Wetlands were subtracted from each parcel and Floor Area Ratios (FAR) were applied to the remaining undeveloped land.



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These were obtained from the EOEa buildout analysis, which considered building height and parking restrictions. A separate FAR was applied for land within and out of floodplains. The FARs used were:

Limited Office District:	FAR
Inside 100-Year Flood Zone:	0.39
Outside Wetland Area & 100-Year Flood Zone:	0.53
Light Industry District:	
Inside 100-Year Flood Zone:	0.32
Outside Wetland Area & 100-Year Flood Zone:	0.42
General Industry District:	
Inside 100-Year Flood Zone:	0.34
Outside 100-Year Flood Zone:	0.46

A summary of the buildout analysis is provided in Sections 5.0 and 6.0.

